Refer to: Burr BD, Hess GH: More primary physicians—The department of family practice at UC, Davis, meets the challenge (In the Forefront). Calif Med 118:57-61, Jan 1973

In the Forefront

More Primary Physicians

The Department of Family Practice at UC, Davis, Meets the Challenge

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MUCH HAS BEEN WRITTEN about the "health care crisis" in our country. Opinions vary from "There is no shortage of physicians, only maldistribution," to "there is a true crisis in health care delivery because of doctor shortages."[1]

It is established that there is a critical shortage of primary care physicians in California.[2,3] Many communities have no physicians, and those that do often see the doctor leave for a variety of reasons with no replacement in sight.

The problem of supplying medical care to rural communities is multi-faceted. Many surveys have been done to ascertain the reasons why physicians leave rural practices.[4] Among the reasons most often cited are overwork, inadequate professional stimulation, inability to get away for post-graduate education, inadequate hospital or office diagnostic facilities, and dissatisfaction with rural living.

For a training program to produce more family physicians and ignore the factors which drive the rural physicians to urban areas would be unrealistic. Since it is obvious that physicians' attitudes are quite fixed by the time they finish an internship, a great deal of energy should be spent at undergraduate levels. Students basically learn from the physician models to whom they are exposed. Thus, introduction into family medicine should be begun during the first year by exposure to physicians doing front-line medicine. Methods need to be devised to allow students to learn first-hand the advantages of rural practice and rural living.

Along with introducing the student of medicine to family medicine, the following areas need to be stressed:

1. *Group Practice.* Unless a rural medical center develops a "critical mass" of manpower, all of the disadvantages of rural practice will be overwhelming. A minimum of two doctors appears to be essential to allow coverage for rest, recreation, and post-graduate education.

2. *Team Approach.* By utilizing the health care team approach, the physician will have more free time.[5,6,7] Nurse practitioners and physician assistants will care for many medical problems within their competence that usually take up many hours of the physician's day. Satellite offices in small communities can be staffed by paramedical personnel. They can do the medical triage and handle many minor problems very efficiently. One of the physicians could travel to the outlying office one or two afternoons a week to see patients with diagnostic problems that have been initially evaluated by the paramedical practitioners. Problems beyond the ability of the

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practitioners could be referred immediately to the central office.

3. *Rural Medical Center.* When possible, the group practice can operate most efficiently near a center, such as a community hospital, where diagnostic facilities and trained personnel are available. Duplication of laboratory and x-ray facilities can be avoided, and because of higher volumes, better equipment and more experienced personnel can be utilized. Having the hospital nearby will eliminate the many hours of driving that isolated rural physicians must now do.

4. *Continuing Education.* A great effort should be made for the training program to provide means for the practicing physician to be involved in a strong continuing education program. Visiting professors, closed television programs, locum tenens and preceptorship programs will keep the practicing physician involved in teaching and exposure to the recent advances in medicine. Students and residents should plan their life style to include at least four weeks a year of postgraduate education.

The University of California, Davis School of Medicine, through the Department of Family Practice, is dedicated to meeting the needs in primary care for Northeastern and Central California.

The Family Practice Residency Program

The School of Medicine of the University of California at Davis was authorized by the Regents of the University of California and the State Legislature in 1963. C. John Tupper, M.D. was appointed dean and began work in Davis in February 1966. The first class of 48 medical students was admitted in September 1968 and was graduated June 15, 1972.

The Department of Family Practice was established in 1970 with the appointment of Len Hughes Andrus, M.D. as professor and chairman in October of that year. The Family Practice Residency Program was approved by the Council on Education, American Medical Association, in May 1971.

Philosophy and Purpose Of the Program

The family physician, practicing both scientific and humanistic medicine, is a personal physician oriented to the whole patient, his family, and the community in which he lives. The residency program is dedicated to producing a physician who is an effective member of a health care team whose training will be relevant to the needs of society now and in the future.

The family physician will serve as a physician of first contact with the patient and provide a means of entry into the health care system. By means of a comprehensive and extensive training program of family medicine, the family physician will provide personal medical care that will handle 80 to 90 percent of all the patients' needs. He will provide entry for the patient into secondary care with the specialists in other fields of medicine, assuring that the patient will have continuity of care following consultation. The family physician will assume responsibility for the patient's comprehensive and continuous health care and act as a leader or coordinator of the health care team designed to provide family oriented care. He will accept responsibility for the patient's total health care needs within the context of his environment, and will stress preventive medicine. The family physician will provide leadership in health affairs within the community, be committed to evaluate new organizational methods of care, and introduce technical advances which will result in improved patient care.

The "New Look"

The Family Practice Residency Programs differ from previous general practice programs in a variety of ways. The older general practice residency programs were inflexibly hospital-centered in the traditional departments with unstructured ambulatory experience in the emergency room and general out-patient clinic. The Family Practice Residency Program stresses the continuity of family oriented care throughout a three-year residency program. During this time the emphasis on in-depth hospital training is at its maximum during the first year, and gradually decreasing during the remaining two years. Increasing time is spent in the ambulatory area throughout the second and third years where the family physician develops the skills necessary to provide for the majority of his patients' needs.

Unique Features of the Program

Features peculiar to the Family Practice Residency Programs are the following:

1. *The Family Practice Model Unit* is the hub of the Family Practice Residency Program. It provides a setting similar to the private offices of practicing physicians. Physicians from the community serve as preceptors in the Family Practice Model Unit to help the residents understand the practice of ambulatory medicine and participate in an educational exchange with the residents. The model unit also serves to provide experience for the resident in understanding medical records, insurance forms, economics, and management of paramedical personnel.

2. *The Problem-Oriented Record,* or the "Weed System," is required in the Family Practice Model Unit. The Problem-Oriented Record is a system of collecting data pertinent to the patient's multiple problems, objectively evaluating this data and formulating an appropriate diagnosis and therapeutic plan. The Problem-Oriented Record also provides a means of therapeutic audit that folows a logical pattern and will be a vehicle for the up-grading of quality of medical care.[8,9]

3. *The Team Approach.* The resident will work within the model of a group practice, where he will be the leader of a health care team consisting of a student nurse practitioner, social worker, visiting home nurse, and other out-reach workers. The resident will become familiar with delegating some jobs to other team members to increase his efficiency, and eventually, when he is in practice, provide him with time to concentrate on the more difficult diagnostic problems and pursue continuing education.

Multi-disciplined conferences are planned which will demonstrate the team approach. The resident will manage these conferences, with participation by the nurse practitioner, the social worker, the visiting home nurse, and any other health care provider necessary for the total care of the patient.

4. *The Locum Tenens Program.* As the resident completes his second year, he will select a locum tenens for a six-week period. The first two weeks will be spent working with the local physician. During the last four weeks, while the resident takes over the practice, the local physician will return to the Sacramento Medical Center for post-graduate training. During this time, the visiting physician will be actively involved as a preceptor in the Family Practice Model Unit, thus ensuring a close relationship between practicing physicians and the Family Practice Residency Program. The resident will be encouraged to take his family with him while serving locum tenens to provide them some exposure to the advantages of living in rural communities. They will have a chance to become acquainted in the town, evaluate the school systems, and gather a great deal of information to assist them in selecting a place to practice.

Upon returning from the locum tenens, the resident will be expected to evaluate his own performance and will be counseled regarding the evaluation of his performance by the physicians in the locum tenens setting. The remainder of his residency electives are then selected to provide further training in fields in which he has found he has special needs.

5. *Research Project.* Each resident will be expected to participate in a research project during the last two years of the residency program. Although there will be no strict guidelines for the research projects, it is anticipated that health care delivery systems will be investigated and record systems and disease coding devised to provide a means for effective clinical research in ambulatory medicine.

6. *Flexibility of the Program.* An important feature of the Family Practice Residency Program is the variety of pathways that a resident may choose. It is desirable to capitalize on previous training and experience of the resident and to provide a learning experience that is relevant to his future needs. If the resident has already chosen the location in which he desires to practice, the particular needs of the patients and physicians in that community will be examined and the training program tailored to meet them.

The Family Practice Residents are assigned in pairs on the major services at the Medical Center. This ensures that one resident will be available every other afternoon to see his patients in the Family Practice Model Unit. The other resident will be available on the ward to take both to care of the resident's patients and to handle any emergency situations that may come up. This schedule obviates the problem of unavailability due to the requirements of the Family Practice Clinic and it has been enthusiastically supported

by the other departments in the Medical Center.

7. *Family Practice In-Patient Service.* The Department of Family Practice operates an in-patient service in the Sacramento Medical Center Hospital. This Family Practice Service is located in a geographically separated area, but in addition it has some beds scattered throughout the other services in the hospital. Problem-oriented records are used on the in-patient service, and the nurses on the Family Practice ward assume an expanded role and are intimately involved in the care of the patients. The ward provides an exemplary vehicle for the delivery of comprehensive health care by the entire health care team. The Family Practice resident admitting a patient to this ward continues the role of the primary physician, as no interns are utilized by the service. All admissions to the Family Practice ward must be approved by the Family Practice resident on call.

8. *Community Medicine-Public Health Rotation.* The community medicine and public health rotation is of two months' duration and it is expected to enable the resident to familiarize himself with the various resources of the city, county and state. A wide variety of interesting electives are available as well as experience in one of the Health Department satellite clinics.

9. *Curriculum Content.* The core content of the Family Practice Residency Program includes the basic knowledge required for comprehensive primary care in the fields of medicine, pediatrics, obstetrics and gynecology, and surgery. The Family Practice resident is considered as a regular resident of the rotations to which he is assigned. This educational experience is supplemented by the continuous exposure in the Family Practice Model Units to the variety of problems of ambulatory patients. The surgical experience for the resident will be tailored to meet the needs of his proposed practice style. It is anticipated that most family physicians will not be undertaking major elective surgical operations, but there may be an occasion when family practitioners in remote areas must be capable of emergency life-saving operations.

Since it is recognized that psychiatry plays an important part in the delivery of primary care, training in psychiatry for Family Practice residents continues throughout the three-year period. The residents are assigned a psychiatrist who relates to them throughout the three-year residency program and is active in the multi-disciplinary Family Practice conferences, stressing the emotional aspects of illness as it relates to the entire family constellation. In addition, special seminars are planned to deal directly with the problems of sex education, marriage counseling, office psychotherapy, psychopharmacology, and the like.

A seminar will be conducted in Business Management. This will include topics such as personnel management, medical economics, malpractice, personnel selection and interviewing techniques, licenses, and insurance. This seminar will be conducted by experts from the business community and consultants in medical economics.

Preceptors from the local community volunteer time to be involved in the teaching program at the Family Practice Model Unit. The preceptors will stress the practical aspects of ambulatory medicine as practiced in their offices, and provide a realistic model for their residents to follow. The preceptors also participate as attending staff for the Family Practice In-Patient Service.

Evaluation

The Family Practice Residency Program is under continual evaluation. The preceptors evaluate each resident with whom they work, and in turn, the residents evaluate them. Medical audits will be conducted on a continuing basis to monitor the quality of care. Residents will be expected to keep records of the types of clinical experiences they have had. They will be evaluated on a quarterly basis by the Program Director.

Future Projects

It is the desire of the Department of Family Practice to develop a strong post-graduate education program that will provide opportunities for practicing family physicians to maintain or increase their competency. It is proposed that in the future the Department of Family Practice provide a team of physicians to go to distant communities to relieve solo or isolated physicians so that they may return for post-graduate education. This will also provide a means of front-line medical experience for residents and staff members. By developing affiliated Family Practice Programs, it is anticipated that most of the health care workers will come from the local communities. It is planned to provide the high schools

and junior colleges with consultants from the Department of Family Practice to explain the career potentials in family medicine. Through this effort, students may become well informed of the Family Practice potential in the field of medicine, and be stimulated to enter the broad but challenging field of primary care.

REFERENCES

1. Schonfeld HK, Heston JF, Falk IS: Numbers of physicians required for primary medical care. N Engl J Med 286:511-576, Mar 1972

2. Hess GH, Andrus LH, Burr BD: Physician supply and distribution in Northeastern California—Implications for medical education (Submitted for Publication)

3. Geyman JP: The Modern Family Doctor and Changing Medical Practice. New York, Appleton-Century-Crofts, pp 33-40

4. Haggerty RJ: Etiology of the decline of General Practice. JAMA 185:180, 1963

5. White KC: Primary medical care for families—Organization and evaluation. N Engl J Med 277:847-852, Oct 1967

6. Andrus LH: Home care for the rural poor. Hospitals 44: Mar 1970

7. Andrus LH: How can we get top notch health care to the cross roads. Medical Care 8:350-352, 1970

8. Weed LL: Medical Records, Medical Education and Patient Care. The Problem-Oriented Record as a Basic Tool. Cleveland, The Press of Case Western Reserve University Press, 1969

9. Bjorn J, Cross H: The Problem-Oriented Private Practice of Medicine: A system for Comprehensive Health Care. Chicago, Modern Hospital Press, 1970

APPENDIX:—*Resident Schedules for Family Practice Residency Program at UC, Davis, School of Medicine*

Month	*First Year*	*Second Year*	*Third Year*
1	Medicine	Medicine	Emergency Room
2	Medicine	Medicine	Locum Tenens
3	Medicine	Medicine	Locum Tenens
4	Med. E.R.	Pediatrics	Pub. Health & Comm. Med.
5	Pediatrics	Pediatrics	Pub. Health & Comm. Med.
6	Pediatrics	Pediatrics	Electives[1]
7	Surgery	OB-Gyn[2]	Electives[1]
8	Surgery	OB-Gyn[2]	Electives[1]
9	Surgery	OB-Gyn[2]	Electives[1]
10	Surg. E.R.	Surgical Elective[3]	Electives[1]
11	OB-Gyn	Surgical Elective[3]	Research
12	Elective	Psychiatry	Electives[1]
	½ day per week in Family Practice Clinic	Three half days per week in the Family Practice Clinic	Three half days per week in the Family Practice Clinic

1 = Electives in X-ray, Neurology and PM&R are strongly suggested
2 = Three months of OB-Gyn or resident may elect 2 months of medical gynecology and one month of elective
3 = Orthopedics, ENT, General Surgery, Anesthesiology, Ophthalmology, Urology may be considered